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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,961	03/19/2001	Brian Nolan	595-1	1275

7590 03/26/2003

Frost Brown Todd LLC
2200 PNC Center
201 East Fifth Street
Cincinnati, OH 45202

EXAMINER

KEASEL, ERIC S

ART UNIT	PAPER NUMBER
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3754

DATE MAILED: 03/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/811,961

Applicant(s)

NOLAN ET AL.

Examiner

Eric Keasel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 13-15 and 29-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 16, 18-28 and 32 is/are rejected.
- 7) ☒ Claim(s) 17 and 33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I, Species C in Paper No. 11 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 13-15 and 29-31 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 11.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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4. Claims 1-12, 16, 18-28, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tubaro (US Patent Number 4,418,887) in view of Block et al. (US Patent Number 5,104,092).

Tubaro discloses valve body/fluid containment member (1, 2, 3), joining structure (6), and an annular sealing cavity with annular seal (8). The cavity is diamond-shaped with two end portions radially inward and outward of a central portion (see Fig. 4 and compare with applicant's Fig. 3A). The sealing member of Tubaro is as much of a rhombus shape as applicant's sealing member is. Neither is a true rhombus with 4 equal sides; however, both meet a broader interpretation consistent with applicant's disclosure. Tubaro discloses the sealing member as being PTFE and discloses the valve body/fluid containment member and joining structure as being plastic (one of two acceptable materials disclosed and claimed by applicant).

Although Tubaro discloses the sealing member as being made of PTFE, Tubaro is silent as to material properties related to the thermal expansion of PTFE. Block et al. disclose a similar ball valve with PTFE seals (30, 32) between valve body/fluid containment member (12) and joining structure (14). Block et al. discloses the valve body/fluid containment member and joining structure as being the other acceptable material (i.e. a metal: steel). Block et al. also explicitly discloses that the PTFE sealing members have a greater coefficient of thermal expansion than the valve body/fluid containment member and joining structure (see column 2, lines 54-66). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the inherent coefficient of thermal expansion properties of PTFE taught by Block et al. with the valve body structure of Tubaro in order to provide a fluid-

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tight seal between the end connector/joining structure and valve body as taught by Block et al. (see column 3, lines 39 and 40).

Allowable Subject Matter

5. Claims 17 and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. It should be noted that the non-elected species would be rejoined to this application when the limitations set forth in claims 17 and 33 are amended into independent claims 1 and 18, as these features are generic to the three species.

6. The following is a statement of reasons for the indication of allowable subject matter:

Although the prior art of record discloses clearance gaps at opposite ends of the sealing cavity, wherein the converging end portions of the cavity converge to and communicate with the clearance gaps, there is no disclosure or suggestion that the annular sealing member extend into the clearance gaps at each end of the sealing cavity, in combination with the limitations set forth in the independent claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Anderson (US Patent Number 3,184,213), Gulick et al. (US Patent Number 3,226,082), Valince (US Patent Number 3,731,904), Melville (US Patent Number 4,134,595), Charland (US Patent Number 4,273,148), Kindersley et al. (US Patent Number 4,556,197), Oliver et al. (US Patent Number 4,911,409), and Steele (US Patent Number 4,928,921) disclose ball valves with similar valve body structure and sealing arrangements.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Keasel whose telephone number is (703) 308-6260. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene, or acting supervisor Ehud Gartenberg, can be reached on (703) 308-2696. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

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March 22, 2003



EHUD GARTENBERG
PRIMARY EXAMINER